

## ABSTRACT OF THE DISCLOSURE

The invention relates to trifluoromethyl sulfonyl and trifluoromethyl sulfonamido compounds and the physiologically acceptable salts and the prodrugs thereof. These  
5 compounds are expected to modulate the activity of protein tyrosine enzymes which are related to cellular signal transduction, in particular, protein tyrosine phosphatase, and therefore are expected to be useful in the prevention and treatment of disorders associated with abnormal protein tyrosine enzyme related cellular signal transduction such as cancer, diabetes, immuno-modulation, neurologic degenerative diseases, osteoporosis and infectious  
10 diseases. The invention also relates to the use of compounds containing fluoromethyl sulfonyl groups as phosphate mimics. These mimics may be used to inhibit, regulate or modulate the activity of a phosphate binding protein in a cell.